

REMARKS

Claims 1-16 are pending in the present application. The definition for substituents "L" and "R²" have been amended in order to provide additional significant distinctions over the cited Tanimoto '817 (USP 6,562,817) reference as discussed in detail below.

Issues Raised in Advisory Action

Claims 1-8 and 11-16 were previously rejected under 35 USC 103(a) as being unpatentable over Tanimoto '817 for the reasons stated in the Advisory Action of April 25, 2008. It is submitted based on the following reasons that this rejection should not be maintained.

Distinctions over Tanimoto '817

Tanimoto '817 is directed to tricyclic compounds for pharmaceutical uses, in contrast to the claimed pyrimidine compounds of the present invention which are directed to crop protection uses. Within an extremely broad and general disclosure directed to pharmaceutical tricyclic compounds and from among several hundreds of different choices, Tanimoto '817 discloses in Table 86 pyrimidines (formula If), wherein ring "B" is a pyrimidine (ring "B" is "S3", see table 56 in columns 115 & 116) substituted by a heterocyclic ring "C" which may correspond to R³ according to the present claims, and wherein ring "A" may also be a phenyl substituent that may correspond to the phenyl ring of formula I according to the present claims. For such pyrimidines, Tanimoto '817 provides a very particular teaching regarding the substituents R⁸ to R¹⁰ of the pyrimidine ring, as well as the substituents of the phenyl ring "A", which lead one skilled in the art away from the crop protection compounds of the present claims.

First, these pyrimidine compounds disclosed by Tanimoto '817 must have a methoxy substituent on the pyrimidine ring (see position R¹⁰ in Table 86 Nos. If-9 to If-28). In contrast, according to the present invention, the pyrimidine ring cannot have any alkoxy group as a substituent (*see* definitions for substituents R¹ and R²).

Secondly, the pyrimidine compounds disclosed by Tanimoto '817 must have an optionally protected hydroxyl group (OH or OM)s as well as a benzyloxy or allyloxy group (see definitions for A6, A8, A32 and A33 therein) as required substituents of the phenyl ring "A". In contrast, according to the present invention, the 5-phenyl ring does not have any optionally protected hydroxy group, any alkenyloxy group or any phenyl-containing substituent including benzyloxy.

Thirdly, the substitution of the 5-phenyl ring according to the present invention completely differs from all substitution patterns of any of the 5-phenyl rings taught by Tanimoto '817 in the tables (see definitions A1 to A142 in Tables 50 to 53). Note especially in these tables the significant differences between the examples of the particular substituents "X" and "Y" at the para-position of the phenyl ring disclosed by Tanimoto '817, and the substituents on the corresponding ring of the compounds according to the present invention.

Consequently, significant patentable distinctions exist between the previously rejected claims and Tanimoto '817. Also, for the pyridines of Tanimoto '817, this reference provides a very specific teaching regarding the substituents R^8 to R^{10} of the pyridine ring and the substituents of the phenyl ring "A" which fails to provide any reasonable suggestion or motivation to one of ordinary skill in the art to attempt to obtain any of the compounds of the present invention. In this regard, the pyridine compounds disclosed by Tanimoto (If -I to If-8, If-29, If-30 in Table 86) must be fully unsubstituted (see R8, R9 and R10 for If-1 to If-4) or have two methyl substituents on the pyridine ring (see R9 and R10 for If-5 to If-8, If-29, and If-30). However, according to the present invention, the pyrimidine ring can neither be unsubstituted nor have two alkyl groups as substituents (see definitions for substituents R^1 and R^2).

Moreover, the pyridine compounds disclosed by Tanimoto '817 must have an optionally protected hydroxy group (OH or OM)s as well as a benzyloxy or allyloxy group (see definitions for A6, A8, A32 and A33 therein) or a substituted amine group (see definitions for A42 and A46 therein) as mandatory substituents of the phenyl ring "A". Again, according to the present invention, the 5-phenyl ring may not have any optionally protected hydroxy group, any alkenyloxy or any phenyl-containing substituent including benzyloxy or any substituted amine group. Still further, taking the broad and generic disclosure of Tanimoto '817 into account with

its thousands of potential chemical structures for compounds used in the pharmaceutical area, it is not understood how the Examiner can reasonably select the structural element ring B in combination with other selected rings without any suggestion that pharmaceutical properties would be improved in order to arrive at the compounds of the present invention directed to uses for crop protection.

Due to the above-noted significant differences between the compounds of Tanimoto '817 having the above-discussed pyrimidine substituents and 5-phenyl ring substituents, and the compounds of the present invention having distinctly different substituents, it is submitted that the significant patentable distinctions exist over Tanimoto '817 such that the previous rejection based thereon must be withdrawn.

It is submitted for the reasons above that the present claims define patentable subject matter such that this application should now be placed in condition for allowance.

If any questions arise in the above matters, please contact Applicant's representative, Andrew D. Meikle (Reg. No. 32,868), in the Washington Metropolitan Area at the phone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

Andrew D. Meikle
Registration No.: 32,868
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant